UNITED STATES DEPARTMENT OF AGRICULTURE FOOD SAFETY AND INSPECTION SERVICE

WASHINGTON, DC

FSIS NOTICE

80-15

12/18/15

UPDATED INSTRUCTIONS FOR THE RAW PORK PRODUCTS EXPLORATORY SAMPLING PROJECT (RPPESP)

DO NOT IMPLEMENT UNTIL JANUARY 4, 2016.

I. PURPOSE

- A. FSIS is reissuing the content of FSIS Notice 23-15, *Raw Pork Products Exploratory Sampling Project (RPPESP)*, and updating it to provide some revised instructions to inspection program personnel (IPP) at establishments that produce raw pork products. IPP are to continue sampling pork products for *Salmonella* as part of the nationwide raw pork products exploratory sampling project (RPPESP). The Agency is transitioning from using a contract laboratory to using FSIS laboratories to deliver the program. This notice cancels FSIS Notice 23-15.
- B. This notice provides updated instructions to IPP for:
 - 1. Scheduling samples;
 - 2. Requesting sampling supplies;
 - 3. Sampling techniques; and
 - 4. Questions IPP are to answer in PHIS for each sample collected.

II. BACKGROUND

As is explained in the January 26, 2015 Federal Register Notice (80 FR 3940), FSIS implemented exploratory sampling of raw pork products to test for pathogens of public health concern, as well as for indicator organisms. FSIS Notice 23-15 announced the beginning of the RPPESP and provided instructions to IPP on how to sample raw pork products. FSIS Notice 33-15, *Updating the Public Health Information System (PHIS) Profile for Raw Pork Products*, provided instructions to IPP on how to update the establishment profile to include additional product groups. FSIS will continue to sample raw pork products under the RPPESP.

III. PRODUCTS ELIGIBLE FOR SAMPLING

A. All establishments that produce raw pork products with an average daily production volume of greater than 1,000 lbs. in eligible product groups (see Tables 1 and 2) are eligible for sampling under this project. Sampling task assignments will be based on data in PHIS on finished product categories and finished product groups; raw intact pork products; and raw non-

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intact product groups as described in Tables 1 and 2 of this notice.

NOTE: The scheduling algorithm will ensure that no more than 8 samples will be scheduled for those establishments that produce an average daily production of greater than 1,000 pounds for all of the product groups identified in Tables 1 and 2 of this notice.

- B. IPP will receive sampling tasks on their PHIS task list.
- C. IPP are to notify official establishment management before collecting a sample that they will be collecting a pork product sample for *Salmonella* analysis.

IV. INFORMATION SHARING WITH PLANT MANAGEMENT

Upon implementation of this notice and at the next routine meeting, the IIC is to inform establishment management at establishments producing products eligible for the RPPESP about the following:

- 1. IPP will continue sampling eligible pork products under the RPPESP and;
- 2. Salmonella results for individual samples collected for this project will be posted in the LIMS Direct. Individual sample results will not result in regulatory control actions.

V. SAMPLING TASK ASSIGNMENT

A. Notification of raw pork products sampling tasks will appear on the establishment task list. IPP are to refer to Tables 1 and 2 for information on sampling project codes and product eligibility descriptions.

Table 1. Eligible Raw Intact Pork Products			
Project Code	PHIS Product Group	Description of PHIS Product Group	
EXP_PK_ICT01	Cuts (including bone-in and boneless)	Food service cuts from primals, portion cuts, or tray- ready cuts prepared for consumers that <u>have not</u> been subjected to processing that renders the product non-intact (e.g., needle or blade tenderized, injected, pumped or vacuum tumbled)	
EXP_PK_IOT01	Other intact	All other intact pork meat not included in the above categories (e.g. foot; neck bones; cutlets, pork for kabobs, pork for stewing, etc.)	

Table 2. Eligible Raw Non-Intact Pork Products		
Project Code	PHIS Product Group	Description of PHIS Product Group
EXP_PK_NCT01	Cuts (including bone-in and boneless)	Food service cuts from primals, portion cuts, or tray-ready cuts prepared for consumers that heen subjected to processing that renders the product non-intact (e.g., needle or blade tenderized, injected, pumped or vacuum tumbled)
	Ground product	Pork product that is run through a grinding system designed to reduce the size of muscle pieces
EXP_PK_COM01	Mechanically separated	Finely textured pork products resulting from mechanical separation and removal of most of the bone from attached skeletal muscle that does not qualify as "pork" per 9 CFR 318.24 and 319.5
	Advanced meat recovery (AMR)	Finely comminuted pork product resulting from mechanical separation and removal of all bone from attached skeletal muscle
	Sausage, patties, or other formed products	Raw pork products that were formed out of comminuted pork
	Other Comminuted	Pork product with a reduced particle size from any other process (e.g. coarse chopped pork)
EXP_PK_NOT01	Other non-intact	Product that is not tray-ready (e.g. steak cubed, diced pork, foot, neck bones, cutlets, pork for kabobs, pork for stewing, etc.) but that <u>has been</u> subjected to processing that renders it non-intact (e.g., needle or blade tenderized, injected, pumped, or vacuum tumbled).

- B. IPP are to refer to <u>FSIS Directive 13000.2</u> for instructions on how to add the task to the task calendar, enter the sample information, submit the sample information to the lab, and print a finalized sample collection form in PHIS.
- C. IPP are to collect and submit the sample to the FSIS laboratory within the sample collection window assigned to the sampling task.

VI. SAMPLING SUPPLIES FOR FSIS RPPESP SAMPLING

- A. The FSIS Laboratories will ship the sampling supplies automatically to the FSIS inspector-incharge (IIC) at the establishments selected for sampling. IPP will receive sampling supplies approximately one week prior to the start of the collection window when the sampling task is added to the PHIS task list. IPP are to ensure sampling supplies are available once the sampling tasks appear on the PHIS Task List. Sampling supplies will arrive in a shipping container labeled with either a RPPSP_C (comminuted products) or a RPPSP_P (whole cuts) sorting label. IPP are to refer to Table 4 and 5 for a list of sampling supplies that they should receive. IPP are to use only the sampling supplies provided by the laboratories that are specific to this sampling project.
- B. If supplies have not arrived 3 business days before the scheduled sampling day, or if the sampling supplies are damaged, lost, or otherwise unavailable for use, IPP are to send a request for the needed supplies via Outlook by selecting one of the following addresses:

FSIS - <u>SamplingSupplies - EasternLab@fsis.usda.gov</u> FSIS - <u>SamplingSupplies - MidwesternLab@fsis.usda.gov</u> FSIS - SamplingSupplies - WesternLab@fsis.usda.gov

- C. IPP are to use the subject heading "RPPESP Sampling Supplies" in the email and include the establishment name and number, the project code, the IPP's contact name and telephone number, and a list of the supplies needed. IPP may also request sampling supplies through PHIS. To make this request, IPP are to first schedule a sample on the Task Calendar. Once it is scheduled, right-click the scheduled lab sampling task on the Task Calendar, then select "Order Supplies" from the drop down menu.
- D. IPP are to use a scoop or similar tool to collect a sample of mechanically separated or AMR (finely textured pork) products. If IPP need such a tool, they are to request enhanced sampling supplies at least 3 business days before the scheduled day of sampling to FSIS Laboratories via Outlook, using one of the following e-mail addresses:

FSIS – <u>SamplingSupplies – EasternLab@fsis.usda.gov</u>
FSIS – <u>SamplingSupplies – MidwesternLab@fsis.usda.gov</u>
FSIS – <u>SamplingSupplies – WesternLab@fsis.usda.gov</u>

IPP are to use the subject heading "Enhanced RPPESP sampling supplies." IPP are to request one enhanced sampling kit for each sample collection event. IPP are to refer to Table 5 for a list of Enhanced RPPESP sampling supplies. IPP are to include in their request the establishment name and street address (no P.O. box).

VII. SAMPLE SELECTION AND ELIGIBILITY CRITERIA

- A. IPP are to refer to the sampling tasks for information on the product sample to collect. IPP may be assigned more than one sampling task code during the same sampling window in an establishment that produces raw intact and raw non-intact pork products.
- B. IPP are to use a method for randomly selecting the production lot for sampling. IPP are to randomly select a day, shift, and time within the sampling window after the sample collection date indicated in PHIS. IPP are to collect samples from all shifts the establishment operates and include Fridays in the random selection.
- C. The following practices **do not** exempt the product from routine sampling:
 - 1. Addition of ingredients such as spices, seasonings, rosemary extracts or vegetables to eligible pork products;
 - 2. Application of an antimicrobial treatment or intervention (other than a treatment that achieves a full-lethality); and
 - 3. Addition of meat or poultry products from a different species to eligible pork products.
- D. The following practices **do** exempt the product from routine sampling:
 - 1. Battered or breaded pork product. For example, dumplings, egg rolls, or pot stickers;
 - 2. NRTE products containing pork. For example, products in the HACCP processing category "Heat-treated but not Fully Cooked Not Shelf Stable;" and
 - 3. Raw pork products intended for use in ready-to-eat (RTE) products at the establishment or another federally inspected establishment.

NOTE: FSIS does not sample product that will receive full lethality treatment at a <u>federally inspected</u> establishment, provided that the establishment's hazard analysis and flow chart show that the product is intended for such a use. Examples of full lethality treatments other than cooking can include high pressure processing and irradiation, provided that the establishment has supporting documentation that shows that the treatment achieves a 5-log reduction for *Salmonella*, and that the establishment applies the treatment in a manner that is consistent with its critical operational parameters.

E. IPP are to refer to Table 3 for information and descriptions of raw pork products that are not eligible for sampling during this phase.

Table 3. Raw Pork Products NOT Eligible for Sampling		
PHIS Product Group	Description of PHIS Product Group	
Carcass (including halves and quarters)	Carcass halves, carcass quarters, whole roasting pig, or a "packer style" dressed carcass (head and kidneys removed and practically free of internal fat). If the carcass has been cut, the pieces are larger than pork primals	
Primals and subprimals	Pork primal cuts are primary cuts of pork used to divide a carcass into manageable, smaller portions. The ham, belly, loin, shoulder, and jowl are pork primal parts (as defined in 9 CFR 316.9(b)). Pork subprimal cuts are secondary cuts of pork derived by cutting down primals.	
Edible offal	Raw variety meat generated primarily from the viscera and head. It includes the liver, heart, chitterlings, and brain.	
Head Meat	Head meat is a group of muscle tissue in both the head and the base of the tongue that remains after removal of the cheek muscle. Head meat excludes the muscle tissue in the snout, lips and ears.	
Cheek Meat	Cheek meat is a group of muscles lying external to the upper and lower jaw bones. Cheek meat should be practically free of lip material, lymph nodes, ear canal and salivary glands	
Pork trimmings	Trimmings are prepared from any portion of the carcass that yields product that will meet the end-item requirements.	

VIII. RAW WHOLE PORK CUTS (INTACT AND NON-INTACT) SAMPLE COLLECTION

A. IPP are to collect fresh, not frozen, raw pork samples in final packaging, whenever possible and an appropriate number of packages to equal 2 lbs. IPP are to place the product collected in its final packaging in the larger, non-sterile bag provided with the sampling supplies.

NOTE: IPP are not to use the Whirl-Pak® bags when collecting products in final packaging.

B. For whole (intact and non-intact) pork cuts not available in their final packaging, IPP are to use the single larger Whirl-Pak® bag and aseptically collect one or more cuts to fill the Whirl-pak® bag leaving 2 to 3 inches of space at the top of the bag. IPP are to expel as much air from the bag before closing. IPP are to refer to the instructions provided in Table 4 for collecting samples of whole intact and non-intact cuts of raw pork. Individual whole pork cuts (intact or non-intact) larger than 2 lbs should not be collected by IPP.

Table 4: Instructions for Sampling Non-frozen, Whole Cuts (intact and non-intact) of Raw Pork Products

IPP are to collect raw pork product in final packaging, whenever possible.

When product is not available in final packaging, or the package is too large, IPP are to aseptically collect samples as described in steps 1 - 7 below.

Sampling Supplies for Whole Cuts (intact and non-intact)

RPPSP-P for whole cuts samples

EXP_PK_ICT01 EXP_PK_NCT01 EXP_PK_IOT01

EXP_PK_NOT01

•

- 1 7.5" x 15" Large Whirl-Pak® sterile plastic bag
- 1 2-gallon containment bag non-sterile (secondary bag)
- 2 pairs of sterile gloves
- 1 6" X 12" plastic sleeve for form
- 1 Form 7355-2A/2B (sample seal set)
- 1 Absorbent pad
- 1 Foam Plug
- 1 Cardboard separator(s)
- 1 Gel coolant pack(s)
- 3 FedEx (preprinted) airbills (1 per FSIS Laboratory for submitting the sample)

Upon receipt of the sampling supplies:

- Verify receipt of all supplies needed to perform the sample collection.
- Remove gel coolant packs from the shipping container and place them in the freezer at least 24 hours prior to sampling. Pre-chill the shipping container.



Sampling steps on day of collection:

1. On the day of sample collection:

- 1. Find a suitable workstation near the production area to place your equipment.
- 2. Clean and sanitize your workstation and caddy and allow them to air dry.



2.

- 1. Wash, sanitize and dry your hands.
- 2. Carefully open the 7.5" x 15" sterile bag. Do not contaminate the interior of the bag.
- 3. Put on one pair of sterile gloves.
- 4. Randomly select a type of non-frozen, raw pork product and aseptically collect 2 lbs and place into the sterile bag.



3.

Carefully squeeze out the air remaining in the bag before closing it. Trapped air may lead to leakage.



1. When closing the Whirl-Pak® bag, IPP 4. are to avoid touching near the opening of the bag. To do this, IPP should grip the outer tabs to fold the bag (avoiding touching the bag itself near its opening). Sterile Bag 2. To reduce the chance of product leakage, IPP should make at least four folds. Fold over the side tabs to secure the folds 5. in place. Do not tie the ends. Sterile Bag Sterile Bag Apply a small barcode to each Whirl-Pak® bag as directed in <u>FSIS Directive 7355.1</u>. 6.

7. Place the Whirl-Pak® bag inside the 2-gallon containment bag provided, expel the excess air, seal and apply a medium-sized barcoded FSIS Form 7533-2B to the secondary containment bag.



IX. RAW GROUND OR COMMINUTED PORK PRODUCTS SAMPLE COLLECTION

A. IPP are to collect fresh, not frozen, raw ground or comminuted pork product samples in their final packaging, whenever possible, and an appropriate number of packages to equal 2lbs . IPP are to place the product collected in its final packaging in the larger, non-sterile bag provided with the sampling supplies.

NOTE: IPP are not to use the Whirl-Pak® bags when collecting products in final packaging.

B. For raw ground, comminuted pork product samples not available in their final packaging, IPP are to aseptically collect grab samples. IPP are to use the three Whirl-Pak® bags when collecting aseptic grab samples. The Whirl-Pak® bags have fill lines to help IPP get the desired sample weight of two pounds. IPP are to collect a sufficient quantity of product to fill each of the three Whirl-Pak® bags to the fill-line. When needed, IPP are to use the sterile spatula to collect mechanically separated and AMR products. IPP are to refer to the instructions provided in Table 5 for collecting samples of raw ground or comminuted pork products.

Table 5. Instructions for Sampling Non-Frozen, Ground or Comminuted Pork Products.

IPP are to collect raw pork product in final packaging, whenever possible.

When product is not available in final packaging or the package is too large, IPP are to aseptically collect samples as described in the following steps.

Sampling Supplies for Ground, Mechanical Separated and Finely Textured Pork Products (AMR):

RPPSP-C for comminuted samples

Project Codes:

EXP_PK_COM01

- 1 M20 Shipping container
- 2 Pair of sterile gloves
- 3 Lined Whirl-Pak® bags
- 1 2 gallon zip-lock type bag (secondary container)
- 1 − 6" X 12" plastic sleeve (for the printed/signed sample form)
- FSIS Form 7355-2A/2B (Sample seals)
- 1 Absorbent pad
- 1 Cardboard separators
- 1 Gel coolant packs
- FedEx (preprinted) air bills



Enhanced RPPESP Kit Additions to above list if requested:

- 1 4-ounce sterile scoop
- 1 sterile spatula
- 2 Disinfectant towelettes



A. Collecting a Raw Ground Pork Sample in Its Final Package

1. When collecting ground pork in its final packaging, collect the appropriate number of packaged products so that the sample equals two pounds.

For example, if raw ground pork is packaged in 1 lb. chubs, then collect two 1 lb. chubs.



Place the product collected in its final packaging in the larger, nonsterile bag provided with the sampling supplies. Do not use the Whirl-Pak® bags.



B. Collecting a Raw Ground Pork Aseptic Grab Sample

- 1. **NOTE:** Use this method to collect raw ground pork product samples if product is not available in its final packaging or the package is too large.
 - 1. Wash and dry your hands.
 - 2. Open the sterile Whirl-Pak® bags. To open, remove the tear strip from the top, grasp the two small white tabs and pull apart. Do not touch the interior surface of the bag.
 - 3. Position the Whirl-Pak® bag close to the area where you will take the samples
 - 4. Put on the sterile gloves.

3.

4.

2. 1. Aseptically collect grab samples of raw ground pork. Collect a sufficient amount of product to fill the three Whirl-Pak® bags up to the fill-line indicated on the bag.

NOTE: The bottom of the Whirl-Pak® bag is gusseted so once opened, the bag will stand upright on its own.

- 2. Carefully squeeze out the air remaining in the bag as trapped air may lead to leakage.
- 1. Avoid touching the opening of the bag when closing the Whirl-Pak® bag by grasping the outer tabs and make at least four tight folds (avoiding touching the bag itself near the bag opening).
 - 2. Tightly fold over the top at least four times to reduce the chance of product leakage.
 - 1. Fold over the side tabs to secure the folds in place. Do not tie the ends.









5. Apply a small barcode to each Whirl-Pak® bag as directed in FSIS Directive 7355.1.



6. Place all 3 Whirl-Pak® bags inside the 2-gallon containment bag provided, expel the excess air, and apply a medium-sized barcoded FSIS Form 7533-2B to the secondary containment bag.



C. Collecting Mechanically Separated Pork or AMR Product Using Supplemental Sampling Supplies

- 1. **NOTE:** Use this method to collect mechanically separated and AMR product.
 - 1. Wash and dry your hands.
 - Open the sterile Whirl-Pak® bags. To open, remove the tear strip from the top, grasp the two small white tabs and pull apart. Do not touch the interior surface of the bag.
 - Position the Whirl-Pak® bag close to area where you will take the samples. The bag has a gusseted bottom so once product is added, it will stand upright.
 - 4. Before donning sterile gloves, use sanitized scissors to cut open the bags containing the sterile scoop and spatula and dispense them onto the aseptic area.
 - 5. Put on the sterile gloves.



2.	
	Aseptically collect grab samples of raw mechanically separated or AMR product. Collect a sufficient amount of product to fill the 3 Whirl-
	mechanically separated or AMR product. Collect
	a sufficient amount of product to fill the 3 Whirl-
	Pak® bags up to the fill-line indicated on the
	bag.
	2 Denocit product from the econo into the

2. Deposit product from the scoop into the Whirl-Pak® bag.

NOTE: The bottom of the Whirl-Pak® bag is gusseted so, once opened, the bag will stand upright on its own.



- 3.1. If necessary, use the spatula to remove product from the scoop into the Whirl-Pak® bag.
 - 2. Use the spatula to work the product down to the bottom of the bag to remove air pockets and to help ensure that enough product is collected to reach the fill line.



4. If product gets onto the outside of the Whirl-Pak® bag, IPP are to use the disinfectant towelettes to wipe off product.



X. COMPLETING THE SAMPLING TASK AND SHIPPING THE SAMPLE

- A. Completing the sampling task in PHIS
 - 1. IPP are to follow the instructions provided in <u>FSIS Directive 13,000.2</u> for completing the sampling task using PHIS. To assist in the sampling task, the IPP may choose to print a draft copy of the sampling form from PHIS for use during sample collection.
 - 2. IPP are to ensure all requested sample information is entered, and the sample questionnaire is completed, in PHIS. The list of questions is included in Attachment 1 "Sampling Questionnaire: Raw Pork Products Exploratory Sampling".

- 3. When sample collection data entry is completed, IPP are to click the "Submit to Lab" button, print a finalized form, and sign the form. PHIS will display a message stating that the sample collection information has been successfully submitted.
- B. Securing, packing and shipping the sample. To pack the shipping container, IPP are to:
 - 1. Remove the gel coolant pack from the freezer, place the absorbent pad in the shipping container, and place the cold pack on top of it;
 - Place the cardboard separator on top of the gel coolant pack to prevent the sample from freezing;
 - 3. Place the sample upright inside the shipping container on top of the cardboard separator;
 - 4. Place the form in its plastic sleeve on top of the sample;
 - 5. Place the foam plug on top of the sample and press down slightly to secure contents;



- 6. Enter the required information on FSIS Laboratory Sample Container Seal (FSIS Form 7355-2A), and apply the seal to the box, using the instructions provided in FSIS Directive 7355.1;
- 7. IPP are to review the information on the pre-printed FedEx air bills provided with the sampling supplies and select the air bill that matches the FSIS Laboratory printed on PHIS Form 8000-18. Enter return address information on that air bill:
- 8. Complete the return address fields on the FedEx billable stamp and apply it to the shipping container. IPP are to call FedEx to schedule sample pick up;
- 9. Maintain the shipping container in the refrigerator and under FSIS control until the sample is picked up by FedEx;
- 10. First shift samples are shipped the same day they are collected Monday through Friday and can be delivered on Saturdays. Second shift samples are collected from Monday through Thursday and shipped at the next available FedEx pick up;

NOTE: Samples are to be collected and shipped to the laboratory on the same calendar day whenever possible. First shift samples that do not arrive the following day will be discarded by the laboratory.

C. Returning sampling supplies

FedEx Ground shipping labels to return sampling supplies can be requested from any of the FSIS Laboratories. Instructions for completing and printing return labels are sent via email to the requestor. Laboratory Contact Information:

FSIS – Sampling Supplies – Eastern Lab FSIS – Sampling Supplies – Midwestern Lab FSIS – Sampling Supplies – Western Lab

XI. RESULTS

Salmonella results for individual samples collected for this project will be posted in LIMS-Direct. Individual sample results will not result in regulatory control actions; therefore, establishments need not hold product.

XII. DATA ANALYSIS

The FSIS Office of FSIS Office of Public Health Science (OPHS) and the Office of Data Integration and Food Protection (ODIFP) will analyze the data collected in the Raw Pork Products Exploratory Sampling Project to determine the percent positive for *Salmonella*. The Agency will use this data to inform food safety policies for pork products.

XIII. QUESTIONS

Refer questions regarding this notice to the Risk, Innovations, and Management Staff through <u>askFSIS</u> or by telephone at 1-800-233-3935. When submitting a question, use the **Submit a Question** tab, and enter the following information in the fields provided:

Subject Field: Enter Notice 80-15

Question Field: Enter question with as much detail as possible.

Product Field: Select **General Inspection Policy** from the drop-down menu.

Category Field: Select **Sampling - Salmonella** from the drop-down menu.

Policy Arena: Select **Domestic (U.S.) Only** from the drop-down menu.

When all fields are complete, press **Continue** and at the next screen press **Finish Submitting Question.**

NOTE: Refer to <u>FSIS Directive 5620.1</u>, *Using askFSIS*, for additional information on submitting questions.

Assistant Administrator

Office of Policy and Program Development

Attachment 1 - Sampling Questionnaire: Raw Pork Products Exploratory Sampling

In PHIS these questions will appear as one of two possible questionnaires dependent upon which project code the sample is assigned to in PHIS. Questions 1-2f appear on both questionnaires. Questions 3-5 appear only on the questionnaire for raw pork products that are not comminuted (intact cuts, non-intact cuts, other intact, and other non-intact). Questions 6-11a will appear on the questionnaire for comminuted raw pork products (ground, AMR, mechanically separated, sausage, patties, or other formed products, and other comminuted). For this reason the numbering of questions below may not match the numbering in PHIS.

IPP are to answer Questions 1-2f below regardless of Finished Product Group selected

- 1. Was a pre-op sanitation inspection task performed immediately before the shift when this sample was collected?
 - a. Yes
 - b. No
- 2. Does the establishment slaughter swine?
 - a. Yes
 - b. No
- 2a. Select the antimicrobial interventions used during the processing of the sampled lot from the list below. Choose all that apply:
 - a. No antimicrobial agent was applied to this product
 - b. Acidified sodium chlorite (e.g., ECOLAB SANOVA® etc.)
 - c. Bacteriophage solutions
 - d. Calcium hypochlorite
 - e. Carnobacterium maltaromaticum solutions containing acetate
 - f. Chlorine (e.g., ACCUTAB® Chlorination)
 - g. Chlorine dioxide (e.g. Ashland Pathguard™)
 - h. Chlorine gas
 - i. DBDMH (1,3-dibromo-5,5-dimethylhydantoin) (e.g., AVIBROM®)
 - j. Hypochlorous acid (electrolytically generated) (e.g., Chloro-San™)
 - k. Hypobromous acid
 - I. Lauramide arginine ethyl ester (LAE) solutions
 - m. Organic Acids (e.g., lactic, acetic, and citric acid) solutions (e.g., SYNTRx® 3200, Precure™/Citrilow™, FreshFx® C-12, FreshFx® L-12)
 - n. Peroxyacetic acid (PAA) mixtures (e.g., ECOLAB Inspexx[™] 100, ECOLAB Inspexx[™] 150, FMC SPECTRUM®, FCN No. 323, Perasan® MP-2, MICROTOX SP®, SteriFX PROTECTFX[™])
 - o. Sodium hypochlorite
 - p. Sodium metasilicate (e.g., AVGuard® XP)
 - q. Solutions of sodium octanoate, potassium octanoate, or octanoic acid
 - r. Solutions of sulfuric acid and sodium sulfate
 - s. Trisodium phosphate
 - t. Other (please specify)
- 2b. If you selected 'Other' for what antimicrobial intervention was used, specify here:

2c. At what processing step(s) were antimicrobial interventions used? Choose all that apply.

- a. Pre-scald
- b. Post scald
- c. Pre-evisceration
- d. Post-evisceration
- e. Pre-chill
- f. Post-chill
- g. Other (please specify)

2d. If you selected 'Other' for what processing step(s) was antimicrobial interventions used, specify the processing step here:

2e. Were the products collected fabricated from a hot-boned or chilled carcass?

- a. Hot-boned
- b. Chilled
- c. Other (such as ice-crusted carcass)
- d. Unknown

Note: For this question FSIS is interested in how the primals and subprimals were fabricated from carcasses. For example, if IPP collect a ground product sample and the source materials were fabricated from a hot boned carcass, IPP would select hot boned (regardless of whether the smaller primals/subprimals/trim was chilled prior to grinding).

2f. Was the pork product sample derived from animal(s) slaughtered at the establishment?

- a. Yes
- b. No

IPP are to answer the following questions only for products that are not comminuted:

- 3. Is the sample skinless, partially skinned, or skin-on?
 - a. Skinless
 - b. Partially skinned
 - c. Skin-on
 - d. Unknown
- 4. Is the sample boneless, partially deboned, or bone-in?
 - a. Boneless
 - b. Partially deboned
 - c. Bone-in
 - d. Unknown

- 5. Which primal part was this sample taken from? a. Jowl b. Shoulder c. Belly d. Loin e. Ham (leg) f. Unknown IPP are to answer the following questions for comminuted products only: 6. Select the product group applicable to the sample collected. a. Advanced Meat Recovery (AMR) or "finely textured pork" b. Ground Product c. Mechanically Separated d. Sausage, patties, or other formed products e. Other Comminuted (reduced particle size) 7. Which of the following options apply to the source material used to collect the sample: a. Entirely frozen b. Entirely fresh c. Mixture of fresh and frozen d. Unknown 8. Was the sample collected prior to non-meat ingredients being added (e.g., spices, seasonings, rosemary extracts, or vegetables)? a. Yes b. No 9. Which species (other than pork) were used to produce the sample (select all that apply)? a. None b. Poultry (chicken) c. Poultry (turkey) d. Beef e. Other (please specify)
 - a. Shoulder Butt
 - b. Leg/Ham
 - c. Loin
 - d. Rib
 - e. Shoulder Picnic
 - f. Side

9a. If you selected 'Other' for which species was used to produce the sample, specify here:

10. Select the source material used to produce the collected sample (select all that apply).

- g. Head meat
- h. Cheek meat
- i. Trim
- j. Mechanically tenderized whole products
- k. Heart
- I. Other (please specify)

10a. If you selected 'Other' for source material used to produce the collected sample, specify here:

- 11. Did the sample collected contain more than one comminuted product group?
 - a. Yes
 - b. No
- 11 (a) What comminuted product groups were used to produce the collected sample (check all apply)?
 - a. Ground pork
 - b. Mechanically separated pork
 - c. Advanced Meat Recovery (AMR) or "finely textured pork"